



Indiana Department of Environmental Management

We Protect Hoosiers and Our Environment.

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(800) 451-6027 • (317) 232-8603 • www.idem.IN.gov

Michael R. Pence
Governor

Carol S. Comer
Commissioner

Notice of Variance

DATE: August 5, 2016

TO: Interested Parties

FROM: Jeffrey L. Sewell, Permits Branch Chief, Office of Land Quality

SUBJECT: Notice of Variance Decision for Duke Energy Indiana, LLC

In accordance with IC 13-14-8-8, the Indiana Department of Environmental Management (IDEM) has issued a decision granting a variance to Duke Energy of Indiana from a requirement of the Coal Combustion Residuals Emergency Rule, LSA Document #16-88(E). The basis for the decision is set forth in the attached letter.

You may have the right to appeal the decision, provided that you file a petition for administrative review as required by IC 4-21.5-3-7. As provided in IC 13-14-8-11, the petition must be submitted to the Office of Environmental Adjudication, 100 North Senate Avenue, IGCN Room N-501 E, Indianapolis, Indiana 46204, within fifteen (15) days after the date of this notice. The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing: (1) the date the document is delivered to the Office of Environmental Adjudication (OEA); (2) the date of the postmark on the envelope containing the document, if the document is mailed to the OEA by U.S. mail; or (3) the date on which the document is deposited with a private carrier as shown by receipt issued by the carrier, if the document is sent to the OEA by private carrier.

The petition must include facts demonstrating that you are either the variance applicant, a person aggrieved or adversely affected by this decision, or otherwise entitled to review by law. The petition must also comply with the other requirements of 315 IAC 1-3-2.

Pursuant to IC 4-21.5-3-5(d), if you submit a written request to the OEA at the above address, the OEA will provide you with notice of prehearing conferences, preliminary hearings, hearings, stays, or orders disposing of all proceedings.

If you have any questions regarding the appeal process, you may contact the OEA at (317) 232-8591.



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Mr. George T. Hamrick
Senior VP Coal Combustion Products
Duke Energy Indiana, LLC
400 S. Tryon Street, ST06A
Charlotte, NC 28202

Dear Mr. Hamrick:

Re: Variance
Duke Energy Indiana, LLC
Cayuga Generating Station
SW Program ID Number 83-UP-01
Vermillion County

Duke Energy Indiana, LLC (Duke Energy) has submitted a request to the Indiana Department of Environmental Management (IDEM), dated July 1, 2016 (VFC# 80320299), for a variance from a requirement of the Coal Combustion Residuals (CCR) Emergency Rule, LSA Document #16-88(E) (now LSA Document #16-207(E)). Duke Energy seeks a variance from the deadline established by 40 CFR 257.101(b)(2), which is incorporated by reference in Section 3 of the CCR Emergency Rule, and which would ordinarily require Duke Energy to cease placing CCR and non-CCR waste into the Lined Ash Pond and Primary Settling Basin at Duke Energy's Cayuga Generating Station by April 17, 2017. Duke Energy's variance request is granted, subject to the terms of this letter.

Regulatory Background

On February 10, 2016, the Indiana Environmental Rules Board adopted the CCR Emergency Rule, which temporarily amends 329 Indiana Administrative Code (IAC) 10 to incorporate by reference 40 CFR 257.50 through 40 CFR 257.106 as to CCR surface impoundments. These regulations include a requirement to conduct an initial assessment of each CCR surface impoundment (a.k.a. "ash pond") by October 17, 2016, to determine if the four factors in 40 CFR 257.73(e)(1) are satisfied. Duke Energy anticipates it will be unable to demonstrate that each of the four factors is satisfied at the Cayuga Generating Station ash ponds. Therefore, these ash ponds must be closed pursuant to the requirements in 40 CFR 257.101(b)(2), which requires Duke Energy to cease placing CCR and non-CCR waste into these ash ponds by April 17, 2017. Your request indicates that complying with the requirement to cease placing CCR and non-CCR waste into the ash ponds involves the closure of the Lined Ash Pond and Primary Settling Basin, conversion to a closed loop bottom ash handling system, and rerouting of certain non-CCR process waters and stormwater from the Lined Pond to a new lined impoundment that will discharge to the Secondary Settling Basin.

Further, your request indicates that despite good faith and diligent efforts, completion of these steps will likely extend beyond the April 17, 2017 deadline, and the extraordinary effort required to meet the deadline would pose an undue hardship or burden on Duke Energy. You requested a variance from this April 17, 2017 deadline and proposed a schedule for coming into compliance by April 17, 2018.

Rationale and Conclusions Regarding the Variance Request

Pursuant to Indiana Code (IC) 13-14-8-8, if the Commissioner determines that immediate compliance with a rule would impose an undue hardship or burden upon an applicant for a variance, the Commissioner may grant a variance from the rule. The following statements from your variance request are particularly relevant to IDEM's determination:

1. "There are no alternative wastewater treatment units on-site that meet the CCR rule requirements and could accept the waste streams at issue. . . . It is also not feasible for the CCR and non-CCR waters to be sent off site due to their large volume. The design flow of the surface impoundment system is in the millions of gallons per day." (Duke Energy Request for a Variance, Section III.A, pages 3-4.)
2. "Duke Energy has also evaluated whether the new lined impoundment and water redirect project could be completed on an expedited basis so that non-CCR process water and stormwater is no longer sent to the Lined Ash Pond and Primary Settling Basin in the interim period while the closed loop bottom ash handling system is being completed. . . . Because eliminating non-CCR process water and stormwater from the Lined Ash Pond and Primary Settling Basin in the interim period would not reduce the likelihood of an impoundment failure and actually carries a risk of exceeding NPDES limits, Duke Energy determined that it was not an acceptable short term solution to mitigate any risk." (Duke Energy Request for a Variance, Section III.A, pages 3-4.)
3. "Even after moving expeditiously to retain the appropriate staff and contractors, it is necessary for many project teams to work seven days a week, week after week, to meet the compliance deadline. This schedule increases the risk of engineering and procurement mistakes that could put the project behind schedule and create safety concerns. . . . The extended compliance deadline would enable the Station to lighten the contractors' schedules, lowering the number of nights and weekends worked and reducing worker fatigue. The extended compliance deadline would also decrease the amount of simultaneous work taking place at the Station to provide a less congested and safer work environment." (Duke Energy Request for a Variance, Sections III.B and III.D, pages 4 and 6.)
4. ". . . [T]he various pieces of equipment installed as part of the dry bottom ash conversion process can only be installed during a unit outage. There are two coal-fired units at Cayuga, and installation of the equipment will require a multi-day outage on each unit.

The Station anticipates it may not have enough regularly scheduled outages of sufficient duration . . . to accommodate the installation [by the compliance deadline]. The timing of equipment delivery could mean that one or both of the units may have to shut down solely for this project, potentially during peak demand periods. This has the potential to adversely affect unit availability and grid stability. Extending the compliance deadline would allow Duke Energy to schedule the required closed loop bottom ash conversion work during scheduled outages." (Duke Energy Request for a Variance, Section III.C, page 5.)

In light of the information presented in your variance request, including but not limited to the foregoing, IDEM has determined that immediate compliance with the subject portion of the CCR Emergency Rule would impose an undue hardship or burden upon Duke Energy. IDEM therefore grants the requested variance. This is a variance from state law only.

Compliance Schedule

Under IC 13-14-8-8(b), if the variance for which a person applies would be in effect for more than one (1) year, the person's application must include a demonstration of how the person would come into compliance with the rule within the period for which the variance would be in effect. In accordance with that provision, your application proposes the following compliance schedule, which is approved as a condition of this variance pursuant to IC 13-14-8-8(e):

1. October 10, 2016 – Complete pile and foundation installation for submerged flight conveyor (SFC)
2. March 31, 2017 – Complete SFC assembly and erection
3. October 13, 2017 – Complete process mechanical installation
4. October 30, 2017 – Begin SFC commissioning
5. November 1, 2017 – Complete construction of the new lined impoundment
6. December 8, 2017 – Complete process electrical installation
7. February 5, 2018 – SFC system available for startup
8. March 23, 2018 – SFC system start-up and performance testing complete
9. April 1, 2018 – Complete water redirect projects to the new lined impoundment
10. April 17, 2018 – Stop all CCR and non-CCR waste streams to Lined Ash Pond and Primary Settling Basin

This variance may be revoked under IC 13-14-8-8(e) if Duke Energy does not meet the requirements of this compliance schedule.

Compliance Schedule Under 42 USC 6945 and 40 CFR 256.26

In addition to determining whether to grant the requested variance under IC 13-14-8-8, IDEM also evaluated your request to determine whether Duke Energy qualifies for a compliance schedule under 42 USC 6945 and 40 CFR 256.26. Specifically, IDEM evaluated your request under the following criteria:

1. Whether other disposal units can be used. The utility or independent power producer must demonstrate it has considered other public or private alternatives to comply with the federal CCR Rule and is unable to use such alternatives. The utility or independent power producer must demonstrate there are no alternative units that meet the federal requirement, either on-site or off-site, that can be used to dispose of the CCR.
2. Whether the utility or independent power producer has made a good faith effort to meet the compliance deadline.
3. Whether there are factors beyond the utility or independent power producer's control that have made it unable to meet the compliance deadline.
4. Whether the utility or independent power producer has identified the specific activities that remain to be completed and proposed a clear, enforceable schedule for completing those activities that will bring it into compliance within a reasonable time (not to exceed 5 years from the date of publication of the new federal criteria).
5. Other factors: the technical complexity of the requirements; the activities that remain to be completed; the reasons for the lack of compliance; other site-specific factors such as geology, geography, weather, and engineering considerations; and the potential risks to human health and the environment resulting from extending compliance dates and any steps taken, or other considerations, that mitigate those risks.
6. Whether the utility can document the above claims or an independent investigation can verify the claims.

IDEM concludes that your request satisfies the foregoing criteria. In reaching this conclusion, IDEM considered your statements quoted above in the section of this letter entitled "Rationale and Conclusions Regarding the Variance Request," along with your proposed compliance schedule.

IDEM also considered, *inter alia*, the low risk that your compliance schedule presents to human health and the environment (see Duke Energy Request for a Variance, Section III.E, pages 6-7), as well as the detailed project timeline, entitled "Cayuga Station Dry Bottom Ash Project," submitted as an attachment to your variance request.

Because IDEM concludes that your request satisfies the agency's criteria for granting compliance schedules under 42 USC 6945 and 40 CFR 256.26, IDEM considers the compliance schedule set forth above to be an approved and enforceable "schedule for compliance" for purposes of those federal-law provisions.

Appeal

You may appeal this decision, provided that you file a petition for administrative review as required by IC 4-21.5-3-7. As provided in IC 13-14-8-11, the petition must be submitted to the Office of Environmental Adjudication, 100 North Senate Avenue, IGCN Room N-501 E, Indianapolis, Indiana 46204, within fifteen (15) days after your receipt of this letter. The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing: (1) the date the document is delivered to the Office of Environmental Adjudication (OEA); (2) the date of the postmark on the envelope containing the document, if the document is mailed to the OEA by U.S. mail; or (3) the date on which the document is deposited with a private carrier as shown by receipt issued by the carrier, if the document is sent to the OEA by private carrier.

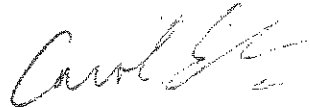
The petition must include facts demonstrating that you are either the variance applicant, a person aggrieved or adversely affected by this decision, or otherwise entitled to review by law. The petition must also comply with the other requirements of 315 IAC 1-3-2.

Pursuant to IC 4-21.5-3-5(d), if you submit a written request to the OEA at the above address, the OEA will provide you with notice of prehearing conferences, preliminary hearings, hearings, stays, or orders disposing of all proceedings. In accordance with IC 13-14-8-11(b), this variance will not take effect until available administrative remedies are exhausted.

If you have any questions regarding the appeal process, you may contact the OEA at (317) 232-8591.

If you have questions regarding this variance, please contact Jeff Sewell at (317) 234-1000 or jsewell@idem.IN.gov.

Sincerely,



Carol S. Comer
Commissioner

cc: Vermillion County Health Department
Vermillion County Commissioners
Vermillion County Solid Waste Management District